

Need for Cognitive Closure of Student Teachers and Their Classroom Management Strategies in Their Teaching Practice

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Abstract (100 -250 slov) nyní 256

Classroom management (CM) can be viewed as a system of strategies employed by a teacher to influence the physical and social space of the classroom to foster an environment where *learning* can occur. One of the key individual characteristics influencing the teachers' classroom management strategies is their *need for cognitive closure* (NFC) which can be defined as individual's motivation in information processing and judgement. The relation of NFC and *CM strategies* (CMS) was investigated on a non-probability sample of student teachers in their first year in master study programme – in their long term practice in lower secondary schools. Data were collected by video-recordings of classes, interviews, reflective diaries and questionnaires in a mixed methods design. Regarding questionnaires, CMS were measured by the adapted *Behavior and Instructional Management Scale* – BIMS (Martin & Sass, 2010). Need for cognitive closure was measured by the adapted *Need for (Cognitive) Closure Scale* – NFCS (Roets & Van Hiel, 2011; Czech version Širůček et al., 2014). Confirmatory factor analysis and reliability estimates supported the predicted structure of the two scales. NFC is reflected in the CMS of student teachers. Student teachers with higher NFC use more CMS focused on rules and leading the classroom. The higher the NFC is the more the student teachers prefer teaching in frontal settings, deviate less from their lesson plan; they have more strict requirements of student's discipline, and insist on students to follow the rules. These findings show that NFC plays an important role in teacher behaviour and should be therefore reflected in teacher education as well.

Extended summary 600-1000 slov (BEZ LITERATURY 1007, literature půjde do příloh)

Theoretical Framework

Classroom management (CM) can be viewed as a system of strategies employed by a teacher to influence the physical and social space of the classroom to foster an environment where *learning* can occur (Christofferson, Sullivan, & Bradley, 2015). *CM skills* are crucial for teachers to create classroom settings where students can learn as effective CM leads to student high *achievement* (Stronge, Ward, & Grant, 2011) and contributes to teacher remaining in the profession. The first years of teaching are reported to be the most challenging and numbers of beginning teachers leave their profession during the first three years (e.g. Smith & Ingersoll, 2004). One of the biggest challenges faced by both *student teachers* and beginning teachers is struggling with CM and discipline (Bromfield, 2006; Dickson et al., 2014). The main reason is found to be the disconnection

between what student teachers know about teaching from their teacher education and what they experience in their classrooms (Stoughton et al., 2007).

Research on CM is an established part of educational sciences. A number of models of CM have been introduced in the last 40 years, i.e. *ecological theory* (Brophy, 2006); *process-outcome theories* (Gettinger & Kohler, 2006) or *behavioural approach* (Landrum & Kauffman, 2006). Nowadays there is growing emphasis on the use of *positive behaviour supports* rather than exclusionary discipline strategies to promote a positive classroom environment (Mitchell, Bradshaw, & Knoff, 2013).

Although the importance of effective CM is repeatedly emphasised, there is only little research on CM *strategies* of student teachers or beginning teachers. Contemporary research shows that teachers use reactive strategies more often than proactive ones at the beginning of their careers (Reupert & Woodcock, 2010), and that student teachers also apply strategies of giving punishment for misbehaviour and giving rewards for positive behaviour more often than experienced teachers (Sueb, 2013). Experienced teachers exert less control over classroom activities and student behaviour than beginning teachers (Ritter & Hancock, 2007).

One of the key personal characteristics influencing teacher's choice and use of classroom management strategies is their *need for cognitive closure* (NFC) – individual's motivation in information processing and judgement, respective a desire for an answer in order to end further information processing and judgment, even if that answer is not the correct or best one (Webster & Kruglanski, 1994). NFC represents a relatively stable dispositional personal characteristic but it can be temporarily increased by situational determinants (time pressure, stress) or decreased (fear of mistakes based on fast judgement). The role of NFC in CM of student teachers has not been investigated in details yet.

Therefore the **aim** of our research is to describe the relation of NFC of student teachers (pre-service teachers) and their CMS used on their long term teaching practice in lower secondary classes in the Czech Republic.

Methods

The research is based on *integrated mixed methods design* (Creswell & Plano Clark, 2011). The main, *qualitative part* was designed as *field research* based on *ethnographic* design. Its aim was to describe conceptions (via interviews and reflective teaching diaries) and use (via observation with video recordings and their transcriptions) of CMS of student teachers. The qualitative data were coded via *thematic* and *open coding*. Analytical procedures of *constant comparison* and *analytical induction* were applied on *event sampling*.

The *quantitative part* of the research includes (a) examination of *quantitative parameters gathered via video recordings* of lessons such as the types of CMS, behaviour alteration messages/techniques, discipline mechanisms, instructional techniques, student negotiation techniques and (b) *statistical analyses of survey data* regarding CMS and individual characteristics of student teachers such as a the NFC. CMS were measured by the adapted *Behavior and Instructional Management Scale* – BIMS (Martin & Sass, 2010) and NFC by the adapted *Need for (Cognitive) Closure Scale* – NFCS (Roets & Van Hiel, 2011; Czech version Širůček et al., 2014). NFCS consists of 15 items with 6-point Likert type ratings measuring 5 sub-scales: desire for predictability, preference of order and structure, discomfort with ambiguity, decisiveness, and close-mindedness. Confirmatory factor analysis supported the theory. Coefficient Cronbach alpha was acceptable: **BIMS (both factors) $\alpha > .70$ and NFC (one-factorial) $\alpha = .84$.**

Sample

The qualitative video-study sample consisted of 6 student teachers in their long term practice in 6 lower secondary comprehensive classes from 6 schools (ISCED 2A) in the Czech Republic. From each student teacher we videotaped (with a teacher camera and students' camera) 6 lessons taught in Czech language or History in 1 class, conducted an interview, questionnaire (BIMS, NFCS) and reflective diaries data collection. The second (contextual) quantitative on-line research sample consisted of 141 student teachers in the first year of their master study programme at Masaryk university (scales BIMS, NFCS).

Findings

As student teachers don't know the class in details, it is more difficult for them to regulate the class learning processes and behaviour than for a regular teacher. Student teachers struggle with use of new CMS which sometimes results in chaotic situations in the class.

The NFC was found to be related to the use of CMS. Student teachers with higher NFC used more CMS focused on rules and leading the classroom ($R = .28, p < .05$). The higher the NFC was the more the student teachers reported to prefer teaching in frontal settings, deviate less from their lesson plan; they have more strict requirements of student's discipline, and insist on students to follow the rules. The reported orientation on rules and directing the classroom was higher with larger classrooms ($R = .25, p < .05$). No gender effect on CMS/NFC of student teachers was found as well as no differences in CMS/NFC based on different school subjects (languages, social sciences, and natural sciences). The quantitative findings will be enriched by the results from qualitative video-data analyses which we are being conducted right now. Both quantitative and qualitative findings show that NFC plays an important role in teacher behaviour and therefore attention should be paid to it in teacher education.

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